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Channel Islands National Marine Sanctuary

The From Shore to Sea web page (<http://channelislands.noaa.gov/edu/shoretosea.html>) has been launched, which invites teachers and students to continue the excitement and discovery of the JASON curriculum focused on California's Channel Islands and the surrounding sea. The curriculum's theme is monitoring change with standards-based lesson plans covering geography, natural history, native culture, watersheds, kelp forests, marine conservation and much more. From this web page, you can investigate several digital labs, including one on the marine reserves of the sanctuary. Local teachers also have the opportunity to nominate students for the Channel Islands Argonauts Program, where 5th - 8th grade students work hand-in-hand with scientists conducting fieldwork.

The sanctuary and the U.S. Geological Survey completed a two-week cruise aboard the R/V *Shearwater*, conducting sidescan sonar mapping and towed video camera operations. Approximately 62 square kilometers of habitat were mapped at San Miguel Island, within and outside the Harris Point Reserve (out to 100 meters water depth). Bottom video was collected at selected locations to ground truth sidescan maps and gather biological data. Approximately 6 kilometers of bottom video were collected at Anacapa Island, 13 kilometers were collected in the Anacapa Passage, and approximately 4 kilometers were collected on the south side of Santa Cruz Island. This project is a partnership with Dr. Guy Cochran, USGS Geophysicist, and has been underway since 1997.

September 6-20, Channel Islands National Marine Sanctuary, in partnership with California Department of Fish and Game, and The Nature Conservancy and Marine Applied Research and Exploration, completed a remotely operated vehicle (ROV) cruise aboard the sanctuary R/V *Shearwater*. The objective of the cruise was to conduct quantitative habitat and biota surveys of site pairs associated with marine protected areas in the Channel Islands. Over 55 kilometers of habitat were surveyed in areas within and outside reserve sites at Anacapa, Santa Cruz and Santa Rosa islands. The original goal of the cruise was to survey at least 48 km of transects. Video from these surveys will be processed to quantify finfish abundance and habitat types at each site.

September 11 marked an historic crossing by the Chumash Indian tribe to the sanctuary. Members of the Chumash Maritime Association paddled 18 nautical miles across open-ocean to Limuw (Santa Cruz Island) in a planked canoe called a tomol. The tomol named *Elye'wun*, was built in the traditional methods and funded by the sanctuary. This is the second such crossing in over 125 years; the first crossing to Anacapa Island then onto Limuw was completed just 3 days before the 9-11 events. The more experienced paddlers reached Limuw in less than 8 hours and allowed the next generation of teenage paddlers to participate in landing the tomol at Scorpion Anchorage. The sanctuary's R/V *Xantu* provided support during the crossing in collaboration with partners from the National Park Service and Santa Barbara Maritime Museum.

Flower Garden Banks National Marine Sanctuary

The sanctuary manager and other science team members conducted a variety of research on board the NOAA Ship *Nancy Foster* through Sept 9. Guest researchers from Texas A&M University, University of Louisiana, and the National Undersea Research Center also participated. Research efforts included: documenting deep water corals and collecting specimens of some species for identification by the Smithsonian and other taxonomists; coral genetics; documenting coral spawning at the Flower Garden and nearby banks via ROV (allowing a longer period of observation than the usual SCUBA operations); and continued survey of invertebrate diversity.

The sanctuary is sponsoring a teacher workshop to bring science technology into the classroom. The event is part of NOAA's National Marine Sanctuaries education mini-grant program designed to facilitate multi-sanctuary education efforts. Workshop participants will learn how technology, especially underwater ROVs, is used to research and explore sanctuary ecosystems in support of resource management. They will leave the workshop having constructed and tested their own mini-ROV to take back to the classroom, along with lesson plans and ideas for incorporating their new knowledge into the classroom. Participants will also be provided information on how to form a team at their high school and/or undergraduate college program to participate in the annual Underwater ROV Competition sponsored by the Marine Advanced Technology Education (MATE) Center. Partners in sponsoring the workshop include Alvin Community College, Texas State Aquarium and MATE Center. The workshop is Oct 22-24, 2004 in Corpus Christi, TX.

Gray's Reef National Marine Sanctuary

The Savannah Ocean Film Festival held September 10-12 was a great success, attracting over 1300 people during the weekend event. Dozens more – youngsters and parents – attended the Children's Film Festival held at the Tybee Island Marine Science Center. This was the first such festival held on the East Coast and served as sanctuary's main outreach event for the year. All staff members supported the efforts along with the National Marine Sanctuary Foundation. Volunteers from the Savannah Scuba Club and Student Ocean Council were also on hand to help throughout the weekend. Filmmakers Bob Talbot and David LeBrun attended the screenings and answered audience questions. Media attention prior to the weekend was extensive.

Gulf of the Farallones National Marine Sanctuary

The sanctuary is working with producer David Bradstreet of Actuality Productions on a documentary for the Discovery Channel program "Modern Marvels" on the disastrous 1984 wreck of the T/V *Puerto Rican*, which released at least 1.47 million gallons of oil into the sanctuary. The oil killed nearly 3,000 seabirds, plus krill, shrimp, rockfish and crab larvae. It is estimated that 8 million Dungeness crabs would have survived to adulthood if not for the spill. A mid-

October airdate is projected.

Hawaiian Islands Humpback Whale National Marine Sanctuary

On August 4, a Hawaiian monk seal gave birth to a pup at Poipu Beach Park. The pup is now over 4 weeks old. The mother and pup will remain together until approximately 6 weeks of age. The sanctuary O'ahu Programs Coordinator supported NOAA Fisheries with the Poipu Hawaiian monk seal protection effort by relieving the On-Scene Site Coordinator for five days. The Kauai Programs Coordinator has been supporting the effort since August 4 by coordinating volunteers and by acting as the Assistant On-Scene Site Coordinator when necessary. This effort is focused on the safety of the public as well as the monk seal mom and pup. The Hawaiian monk seal is the most endangered pinniped in the United States, second only in the world to the Mediterranean monk seal, which numbers only a few hundred. The current population is estimated at 1300 individuals. Approximately 1200 of the monk seals call the Northwestern Hawaiian Islands home while less than 100 are found in the main Hawaiian Islands.

Monterey Bay National Marine Sanctuary

On September 15, the California Coastal Conservancy awarded a \$200,000 grant to the Monterey Bay Sanctuary Foundation for the implementation of the Monterey Bay National Marine Sanctuary's Water Quality Protection Program (WQPP). This funding will support specific projects developed from strategies contained in the WQPP's Urban Runoff, Agricultural, and Beach Closure Action Plans. Specific projects include agricultural water quality technical training courses for growers, urban runoff technical training for municipal officials and field crews, restaurant and automotive service sector outreach, and plumbers workshops.

Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve/ Proposed National Marine Sanctuary


Artifacts indicating the remains of an early 19th-century whaling ship were discovered by NOAA divers amid the coral reefs off Pearl and Hermes Atoll in the Northwestern Hawaiian Islands. The discovery is highly significant, as they likely signal the remains of one or both British whalers, the *Pearl* and the *Hermes*, documented as lost in that area. The *Pearl* struck the reef first on the night of April 24, 1822. The *Hermes* rushed to help, but met the same fate. All crewmembers survived and made it ashore to a nearby island, from which they were later rescued. Very little else is known about the event. The wrecks have remained unseen for 182 years. Hawaiians often enlisted as crew on board the Pacific whaling fleet. Found artifacts include: two large iron anchors, four large trypots (cauldrons used to process the oil on deck), bricks from the tryworks structure for the trypots, gaffs and whalecraft used in hunting and processing whales, pintles or bronze hardware attached to the

rudder, copper fasteners/spikes, and copper sheathing which lined the lower hull. In addition, the surrounding fore reef appears to contain sections of the ship itself. The area of wreck debris spans approximately 660 meters. The discovery by marine debris removal specialists surfaced as part of a cooperative NOAA effort. Staff for the National Marine Sanctuary Program provided the debris removal crew (specialists with the Pacific Islands Fisheries Science Center (PISFC)/Coral Reef Ecosystem Division (CRED)) with background information on potential shipwreck sites and briefed the divers on how to identify and document artifacts encountered opportunistically during clean-up activities. There are no records for any other whaling losses at the atoll. The newly discovered whaling wreck site lies within State of Hawai'i waters and is protected from disturbance by federal and state preservation laws.

National Marine Sanctuary Program

From August 20-29, NOAA's NMSP and the U.S. Navy's Office of Naval Research (ONR) conducted the "2004 Hunt for the *Alligator*," an expedition to search for the wreck of the U.S. Navy's first submarine, the *Alligator*, which was lost during a storm in 1863. The ONR-funded mission was conducted out of Ocracoke Island, N.C. on the Navy's "Afloat Lab" YP-679. The Hunt included an ambitious schedule of scientific and educational activities, and presented a unique opportunity for inspiring people to learn more about oceans, sciences, technology, and history. The science team included researchers and graduate students from NOAA, East Carolina University, and the University of Rhode Island, a midshipman and a professor from the Naval Academy, and a teacher and senior student from Stone Ridge School in Bethesda, MD. Instruments used included a side-scan sonar, a magnetometer, and a Remotely Operated Vehicle (ROV). The team managed to survey a larger search area than the initially planned 50-square nautical miles, despite having to cancel the last two days of surveys because of inclement weather. The research team will now focus on analyzing the data gathered during the survey. The expedition was widely covered by the news media. Articles appeared in the Washington Post, Baltimore Sun, Richmond Times-Dispatch, Virginian-Pilot, Raleigh News and Observer, Chicago Tribune, Charleston Post and Courier, and numerous other outlets. Radio stations nationwide also interviewed the expedition team.

NOAA's efforts for the Preserve America Initiative received recognition by the Advisory Council for Historic Preservation (ACHP). On September 9, 2004, the ACHP announced the launching of NOAA's Preserve America website on their own homepage, www.achp.gov. The NOAA website has also been added as a reference in the Information Clearinghouse section of the central Preserve America website, www.preserveamerica.gov. On Friday, September 17, 2004, NOAA's efforts were further recognized at the Preserve America Steering Committee Meeting. Dan Basta presented a short presentation on NOAA's efforts to fulfill the Preserve America E.O. 13287, which directs Federal agencies to improve their management of historic properties and to foster heritage



tourism in partnership with local communities. Through creative and innovative ideas and robust participation, NOAA is looking to further promote its heritage resources – from historic maps and charts to buildings and shipwrecks – and make them accessible to the public through a myriad of programs and partnerships.